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EXAMINER

WILDER, CYNTHIA B

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

ATTACHMENT TO ADVISORY ACTION

1. Applicant's amendment filed 7/11/2008 after the final rejection is acknowledged. However, the amendment does not place the claims in better condition for allowance. Accordingly, the rejections are maintained and the response to Applicant's arguments presented below.

Response to Arguments

2. Applicant traverses the rejections on the following grounds: With regards to claim 1, Applicant states that the Examiner cites McFarland to show the limitations of claim at the third and fourth steps. Applicant states that the technical information in 0090 in McFarland has nothing to do with DFWM in a microarray. Applicant states "in contrast, [0090] of McFarland is related to Figure 14, or a system to characterize the relative radiance, luminance, and chromaticity of an array of materials. Applicant discusses the figure 14 and states that there is nothing in the [0090] in McFarland and Figure 14 to suggest anything related to claim 1. There is no disclosure or even a suggestion of placing a single template located between the array and an optical detector to include hoes arrange to selectively transmit the DFWM single from the microarray to the optical detector and to block pump light and probe light in the DFWM system from entering the optical detector and measuring an output of the optical detector to represent the DFWM signal". Applicant states that in McFarland, the spectral filter 1411 filters spectral components in the light from the library 1401 and has nothing to do with the recited spatial filter in claim 1.

With respect to claim 2, Applicant argues that the Examiner cites Sandstrom to show the features at the third and fourth steps of the claim. Applicant states that Sandstrom discloses probe sites and reference sites as shown in Figure 6. Applicant states that this disclosure fails to show the microarray having a blank area between two adjacent DNA cells and scanning the blank area through the DFWM system to measure a single and using the measured signal in the blank area to determine a level of hybridization and washing in preparing the DNA cells and background optical noise.

Applicant states that the claim 1 further recites a substrate material shaped to include curved surfaces to define a shape of an optical resonator which supports at least one whispering gallery mode. Applicant argues that the Examiner of different parts within one cell. Applicant states that the cited portions, however, do not support the contention made by the Patent Office.

3. All of the arguments have been thoroughly reviewed and considered but are not found persuasive for the reasons that follow: In response to Applicant's arguments concerning the McFarland reference, specifically the citation at [0090] and Figure 14, Applicant reminded that the rejection is not based on McFarland alone but a combination of McFarland in view of Mann et al in view of Sandstrom and further in view of Wenberg et al. Further, Applicant only pointed to one citation of McFarland and not the entire reference as a whole. Specifically, the reference of McFarland clearly teaches that the spectroscopic techniques, DFWM and laser-induced fluorescence for analyzing a microarray is clearly within the scope of their invention as noted at paragraph 0062. Applicant cites Mann et al for information regarding how this

spectroscopic technique operates. The paragraph at [0090] of McFarland clearly teaches and depicts in Figure 14 that optical detector in association with the array and spectroscopic techniques as indicated earlier within the Patent are within the scope of the invention of McFarland. The paragraph [0090] provides the teaching of location of the optical detector in conjunction with the microarray and well as the use of "filters" for controlling light emission. While McFarland does not expressly state in 0090 that the filter is use to transmit the DFWM signal, this limitation is implied in the teachings of the use of DFWM as one of the desired spectroscopic techniques. Nonetheless to provide more support for the limitation recited at step 3, Mann provides the limitation recited therein in more details, including the use of filters arranged to selectively transmit the DFWM signal from a surface and to block pump light and probe light in the DFWM system from entering the optical detector (see again Mann et al, pages 476 and 477, section 3:"Experimental Method" and figures 2 and 3). Further in response to Applicant's arguments concerning the use of "spectral filters versus spatial filters", the instant claims do not recite any "spatial filters" or even the use of "filters". Likewise, the specification does not provide a limiting definition of the "optical detector" or "holes" which would limit the instant claims to "spatial filters". Thus, given the broadest reasonable interpretation of the claims, the Examiner maintains that the cited prior art is within the scope of the instant invention.

With regards to Applicant's arguments concerning the claim 2, Sandstrom specifically teaches at paragraph 0019 the use of a reference for comparison. The paragraph teaches "comparison of a probe site and a reference (i.e., **blank** or non-

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hybridizable site [eliminates background fluorescence and residual excitations light]; comparison of a group of probe sites with an equal number of reference sites (i.e., enhances the signal to noise ratio, allows for averages of hybridization across many probe sites)]". Given that Sandstrom teaches the use of a blank, this argument is not found persuasive as Applicant provides no evidence to support the conclusion that Sandstrom is non-analogous art.

In response to Applicant arguments concerning "curved surfaces" and "whispering gallery mode", it is noted that the features upon which applicant relies as noted earlier are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Likewise applicant does not provide any evidence to support the argued conclusions. In view of the foregoing, the rejections of the final Office action are maintained.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CYNTHIA B. WILDER whose telephone number is (571)272-0791. The examiner can normally be reached on a flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571) 272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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